Please provide the following information, and submit to the NOAA DM Plan Repository.

Reference to Master DM Plan (if applicable)

As stated in Section IV, Requirement 1.3, DM Plans may be hierarchical. If this DM Plan inherits provisions from a higher-level DM Plan already submitted to the Repository, then this more-specific Plan only needs to provide information that differs from what was provided in the Master DM Plan.

URL of higher-level DM Plan (if any) as submitted to DM Plan Repository:

1. General Description of Data to be Managed

1.1. Name of the Data, data collection Project, or data-producing Program:

National Coral Reef Monitoring Program: Shallow Water Conductivity-Temperature-Depth (CTD) Profiles for selected locations across the Hawaiian Archipelago since 2013

1.2. Summary description of the data:

Near-shore shallow water Conductivity-Temperature-Depth (CTD) surveys provided vertical profiles of temperature, salinity, and turbidity providing indications for water masses and local sea water chemistry changes. These surveys were conducted to characterize the spatial structure of the physical and chemical properties of the ocean environment influencing the living coral reef resources observed during REA and towed-diver surveys. Water samples were collected at the shallow water CTD sites to examine near-shore water quality. Shallow CTD casts are vertical profiles (max 30 meter depth, downcast only) of water column conductivity, temperature, and pressure (Sea-Bird Electronics, SBE19-plus; accuracy of 0.005 S m-1 in conductivity, 0.0002C in temperature, and 0.1% in pressure). A transmissometer (Wetlabs Inc; provides profiles of beam transmittance, related to turbidity) and a dissolved oxygen sensor (Sea-Bird Electronics, SBE43; accuracy of 2% of saturation) are also attached. Data are collected by lowering the CTD in a profiling mode from a small boat at a descent rate of approximately 0.5 to 0. 75m s-1 to a maximum depth of 30m. Data processing was performed using Seabird Instrument's SeaSoft SBE Data Processing Software (http://www.seabird.com/software/SBEDataProcforWindows.htm).

1.3. Is this a one-time data collection, or an ongoing series of measurements?

One-time data collection

1.4. Actual or planned temporal coverage of the data:

2016-09-01 to 2016-09-27, 2013-10-18 to 2013-10-30, 2013-08-02 to 2013-08-22, 2013-09-05 to 2013-09-18, 2015-07-31 to 2015-08-19, 2013-07-13 to 2013-07-14

1.5. Actual or planned geographic coverage of the data:

W: -160.2448587, E: -154.8055483, N: 22.17813995, S: 18.92598792
Main Hawaiian Islands (MHI), including Hawaii, Kauai, Maui, Oahu, Molokai, Niihau, and Lanai.

W: -178.3891327, E: -166.1153708, N: 28.5069935, S: 23.60595658
Northwestern Hawaiian Islands (NWHI), including French Frigate, Kure, Lisianski, and Pearl & Hermes.

1.6. Type(s) of data:
(e.g., digital numeric data, imagery, photographs, video, audio, database, tabular data, etc.)
Table (digital)

1.7. Data collection method(s):
(e.g., satellite, airplane, unmanned aerial system, radar, weather station, moored buoy, research vessel, autonomous underwater vehicle, animal tagging, manual surveys, enforcement activities, numerical model, etc.)
Instrument: CTD
Platform: Not applicable
Physical Collection / Fishing Gear: Not applicable

1.8. If data are from a NOAA Observing System of Record, indicate name of system:

1.8.1. If data are from another observing system, please specify:

2. Point of Contact for this Data Management Plan (author or maintainer)

2.1. Name:
Annette M DesRochers

2.2. Title:
Metadata Contact

2.3. Affiliation or facility:
Pacific Islands Fisheries Science Center

2.4. E-mail address:
annette.desrochers@noaa.gov

2.5. Phone number:
(808)725-5461

3. Responsible Party for Data Management
Program Managers, or their designee, shall be responsible for assuring the proper management of the data produced by their Program. Please indicate the responsible party below.

3.1. Name:
Charles W Young

3.2. Title:
Data Steward

4. Resources

Programs must identify resources within their own budget for managing the data they produce.

4.1. Have resources for management of these data been identified?

Yes

4.2. Approximate percentage of the budget for these data devoted to data management (specify percentage or "unknown"):

Unknown

5. Data Lineage and Quality

NOAA has issued Information Quality Guidelines for ensuring and maximizing the quality, objectivity, utility, and integrity of information which it disseminates.

5.1. Processing workflow of the data from collection or acquisition to making it publicly accessible

(describe or provide URL of description):

Process Steps:

- The CTD package is deployed off a small boat using a hand line. The CTD is held just under the surface for 1 minute to cycle water through the instrument and tubing. Afterwards the CTD is lowered at an even pace to a depth between 20-30m. A GPS waypoint is taken at the beginning of the cast to mark the position and time.
- The raw data are processed by the SeaBird data processing software (http://www.seabird.com/software/sbe-data-processing) using the following steps: Data conversion Filter AlignCTD Loop Edit Derive Bin Average Each header in the raw and processed files is manipulated to include the latitude, longitude, and date/time (in UTC) of the cast. The result is a standard ascii .cnv file, in addition to the raw .hex file.

5.1.1. If data at different stages of the workflow, or products derived from these data, are subject to a separate data management plan, provide reference to other plan:

5.2. Quality control procedures employed (describe or provide URL of description):

The data is quality controlled by CREP personnel after the data is downloaded from the instrument.

6. Data Documentation

The EDMC Data Documentation Procedural Directive requires that NOAA data be well documented, specifies the use of ISO 19115 and related standards for documentation of new data, and provides links to resources and tools for metadata creation and validation.

6.1. Does metadata comply with EDMC Data Documentation directive?

Yes

6.1.1. If metadata are non-existent or non-compliant, please explain:

6.2. Name of organization or facility providing metadata hosting:
NMFS Office of Science and Technology

6.2.1. If service is needed for metadata hosting, please indicate:

6.3. URL of metadata folder or data catalog, if known:
https://inport.nmfs.noaa.gov/inport/item/36818

6.4. Process for producing and maintaining metadata
(describe or provide URL of description):
Metadata produced and maintained in accordance with the NMFS Data Documentation Procedural Directive: http://www.nmfs.noaa.gov/op/pds/documents/04/111/04-111-01.pdf

7. Data Access
NAO 212-15 states that access to environmental data may only be restricted when distribution is explicitly limited by law, regulation, policy (such as those applicable to personally identifiable information or protected critical infrastructure information or proprietary trade information) or by security requirements. The EDMC Data Access Procedural Directive contains specific guidance, recommends the use of open-standard, interoperable, non-proprietary web services, provides information about resources and tools to enable data access, and includes a Waiver to be submitted to justify any approach other than full, unrestricted public access.

7.1. Do these data comply with the Data Access directive?
Yes

7.1.1. If the data are not to be made available to the public at all, or with limitations, has a Waiver (Appendix A of Data Access directive) been filed?

7.1.2. If there are limitations to public data access, describe how data are protected from unauthorized access or disclosure:

7.2. Name of organization of facility providing data access:
National Centers for Environmental Information - Silver Spring, Maryland

7.2.1. If data hosting service is needed, please indicate:

7.2.2. URL of data access service, if known:
http://accession.nodc.noaa.gov/0161327
http://www.pifsc.noaa.gov/library/pubs/Hoeke_etal_JOO_2009.pdf
http://accession.nodc.noaa.gov/0161170
http://accession.nodc.noaa.gov/0161171

7.3. Data access methods or services offered:
Data can be accessed online via the NOAA National Centers for Environmental

Information (NCEI) Ocean Archive.

7.4. Approximate delay between data collection and dissemination:
Unknown

7.4.1. If delay is longer than latency of automated processing, indicate under what authority data access is delayed:

8. Data Preservation and Protection

The NOAA Procedure for Scientific Records Appraisal and Archive Approval describes how to identify, appraise and decide what scientific records are to be preserved in a NOAA archive.

8.1. Actual or planned long-term data archive location:
(Specify NCEI-MD, NCEI-CO, NCEI-NC, NCEI-MS, World Data Center (WDC) facility, Other, To Be Determined, Unable to Archive, or No Archiving Intended)
NCEI-CO

8.1.1. If World Data Center or Other, specify:

8.1.2. If To Be Determined, Unable to Archive or No Archiving Intended, explain:

8.2. Data storage facility prior to being sent to an archive facility (if any):
Pacific Islands Fisheries Science Center - Honolulu, HI

8.3. Approximate delay between data collection and submission to an archive facility:
Unknown

8.4. How will the data be protected from accidental or malicious modification or deletion prior to receipt by the archive?
Discuss data back-up, disaster recovery/contingency planning, and off-site data storage relevant to the data collection
The data resides in an MS Access database, which is maintained and regularly backed up by PIFSC ITS.

9. Additional Line Office or Staff Office Questions

Line and Staff Offices may extend this template by inserting additional questions in this section.